

# South Dade Investigation Workshop

September 3, 2015  
West Palm Beach, Florida

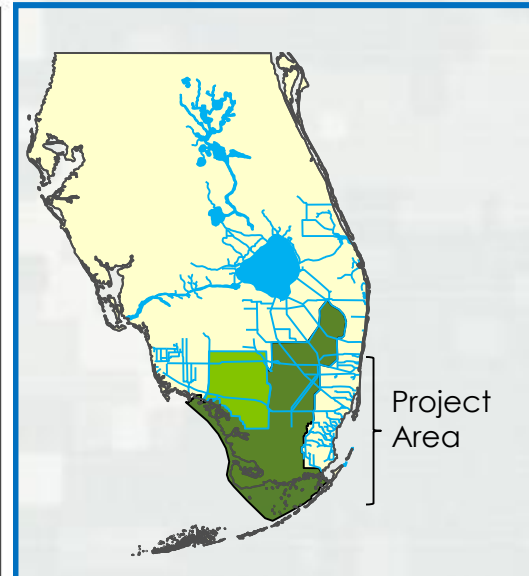
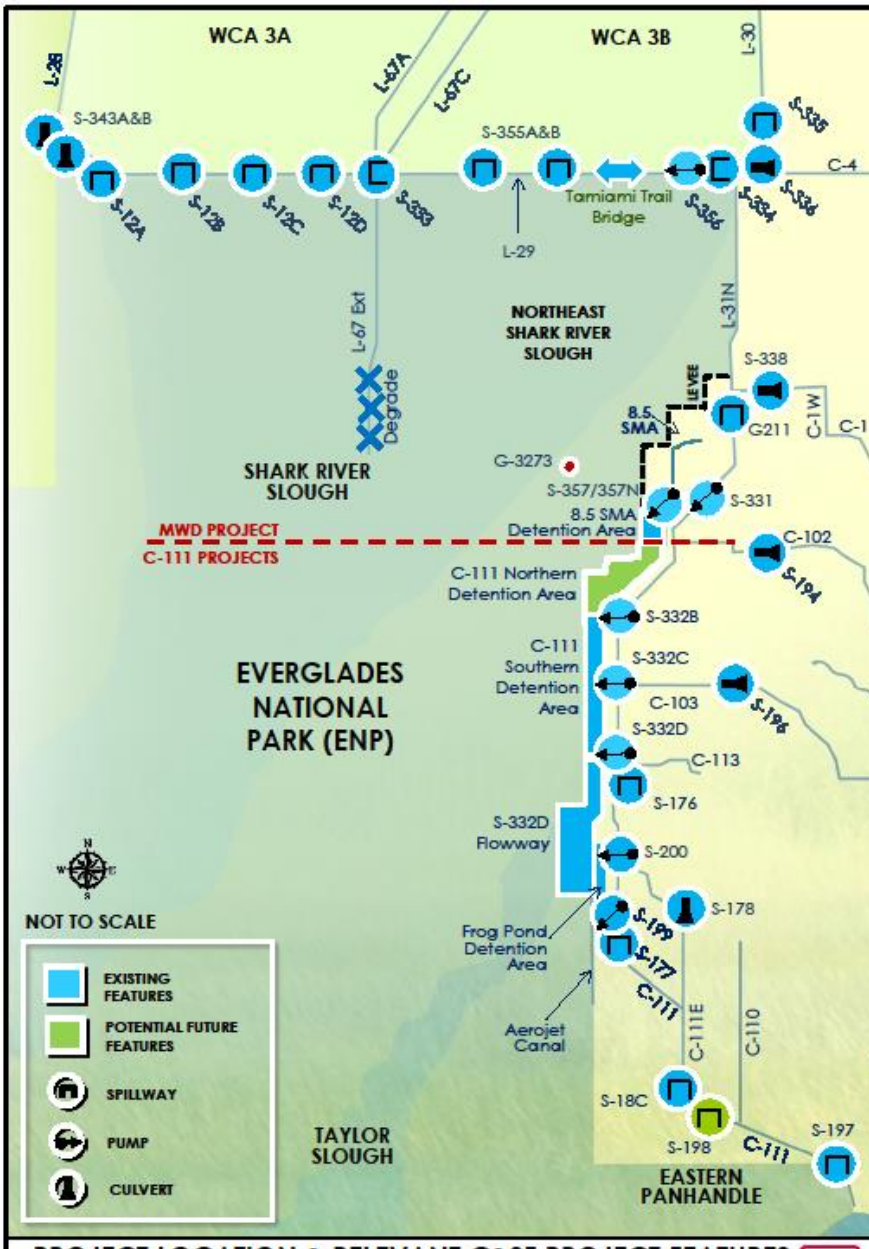


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# MWD Increment 3 Combined Operational Plan (COP)



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**C&SF STRUCTURES  
RELEVANT  
TO THE COMBINED  
OPERATIONAL PLAN**



# Increment 3 - Purpose

- Define operations for the constructed features of the MWD and Canal-111 South Dade projects
  - considering implementation constraints within the Central and Southern Florida (C&SF) Project
  - identifying opportunities for flexibility in water management
- Maintain the Congressionally-authorized multiple purposes of the C&SF Project
  - flood control
  - water supply for municipal, industrial, and agricultural uses
  - prevention of saltwater intrusion
  - water supply for Everglades National Park
  - protection of fish and wildlife





# Increment 3

- Revise WCA/ENP/SDCS Water Control Plan (Vol. 4) to include
  - Constructed features of MWD and C-111 South Dade Projects
  - WCA-3A Rainfall Plan updates
  - Additional 2.6 miles of bridges on Tamiami Trail and raising of TTM roadway
  - Eliminated or constrained Column 2 operations
- Formulation efforts will be informed by information obtained from
  - Increment 1 and Increment 2 field tests
  - Receipt of NEPA Scoping comments
- Anticipate Phased Implementation of operations
  - Public Coordination expected to begin XXXX



\*\* FEATURES NEEDED FOR FULL IMPLEMENTATION OF INCREMENT 2

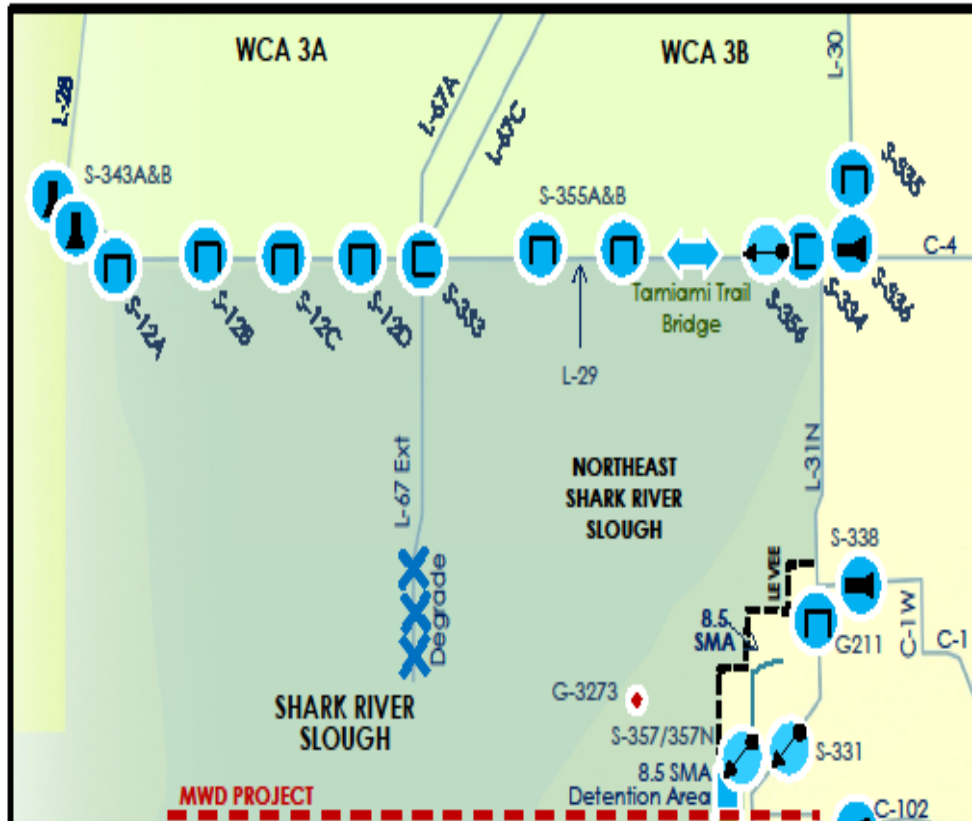
\*\*\* ONE YEAR OF 2nd INCREMENT TESTING NEEDED PRIOR TO INITIATION OF INCREMENT 3: REVISION OF WCA/ENPISDCS WCP (Vol. 4)

# Modified Waters Deliveries to Everglades National Park (MWD) Project



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# MWD Project Features and Status



## Project Features

- S-355A&B (L-29): Complete
- S-333 Modification: Complete
- S-356 (L-31N): Complete
- Tamiami Trail Modifications: Complete
- L-67 Extension: 4 of 9 miles Complete
- 8.5 Square Mile Area Perimeter Levees and Pump Station: Complete
- S-357N: To be constructed
- Tigertail Camp: Complete

## Other Project Activities

- Increment 0 (Pump Test)
- Increment 1 (G-3273 Relaxation and S-356 Field Test)
- Increments 2 and 3 (COP)



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# MWD Project Objectives

Take steps to restore the natural hydrologic conditions within Everglades National Park, to the extent practicable.

- Timing: Changing the schedule of water deliveries so that it fluctuates in consonance with local meteorological conditions, including providing for long term and annual variation in ecosystem conditions in the Everglades;
- Location: Restoring WCA-3B as a functioning component of the Everglades hydrologic system\* and restoration of water deliveries to Northeast Shark River Slough the center of the historic Shark River Slough; (\*modified by CEPP – ROD signed 8/31/2015)
- Volume: Adjusting the magnitude of water discharged to Everglades National Park to minimize the effects of too much or too little water.



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# Canal-111 South Dade (C-111 SD) Project



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# C-111 SD Project Objectives

- Restoration of historic hydrologic conditions in the C-111 Basin.
- Protection of natural values associated with Everglades National Park
- Elimination of damaging freshwater inflows to Manatee Bay/Barnes Sound
- Maintain flood protection for the C-111 Basin, east of L-31N and C-111.



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# C-111 SD Project Features and Status



## Detention Areas and Levees

- C-111 Northern Detention Area: Award 30 Sep 15
- C-111 Retention/Detention Area: Complete
- Internal Flowway berms: Award 30 Sep 16
- Modification to S-360 weirs: Award 30 Sep 16
- Richmond Dr. Modifications: Award 30 Sep 16

## Pump Stations

- Interim S-332B: Complete
- Interim S-332C: Complete
- S-332D: Complete

## Bridge

- Taylor Slough Bridge: Complete

## Backfilling

- C-109 Backfilling: Complete
- C-111 Spoil Mound Removal: Complete
- L-31W Backfilling: Award TBD
- Modification to S332D Flowway: Award TBD



# Increment 1

## G-3273 Relaxation and S-356 Field Test

### L-29 Canal at 7.5 feet NGVD





# Increment 1

MWD Increment 1 field test is a two-year Planned Deviation to the 2012 WCA, ENP, and SDCS Water Control Plan

- ▶ Raises G-3273 constraint of 6.8 feet NGVD and tests S-356 PS
- ▶ L-29 Canal maximum operating stage remains at 7.5 feet NGVD
- ▶ Testing protocol to define operating criteria for S-357N

## ■ OBJECTIVES

- ▶ Improve hydrological conditions in NESRS through the relaxation of the G-3273 stage criteria to increase water deliveries from WCA 3A to NESRS, while maintaining other C&SF Project authorized purposes.
- ▶ Use the S-356 pump station to return seepage to NESRS and manage seepage from NESRS to the L-31N Canal resulting from the relaxation of the G-3273 stage constraint on S-333, in conjunction with increased flows through the S-333 spillway to NESRS via the L-29 Canal.
- ▶ Improve hydrological conditions in NESRS by maximizing the flexibility and efficiency of the existing infrastructure, including use of seepage management (e.g., S-356) to complement inflows to NESRS from WCA 3A.



# Increment 1

- OBJECTIVES - continued
  - ▶ Gather and analyze infrastructure performance, ecologic, hydrologic and water quality data sufficient to support Increment 2, resulting in the following:
    - Data gathering sufficient to support water quality certification
    - Refined operational criteria for the MWD and C-111 South Dade Projects
    - Updates to the 2012 Water Control Plan
- Timeline
  - Test Period
    - Depends on completion of Increment 0 (Mechanical Testing)
    - Will initiate when hydrologic conditions allow for relaxation of G-3273 above 6.8 ft NGVD consistent with the objectives of this field test.
- Outcome
  - Interim Operating Criteria



# Increment 2

## G-3273 Relaxation and S-356 Field Test

### L-29 Canal up to 8.5 feet NGVD



# Increment 2

- Increment 2
  - Raises G-3273 constraint and tests S-356 with the L-29 Canal maximum operating stage raised (up to 8.5 ft NGVD)
  - Operation of 8.5 SMA S-357N
  - Use of C-111SD constructed features
  - Additional structures/components may be included
  - Dependent on acquisition of TTM RE Interests
- Outcome
  - Revisions to WCP (1<sup>st</sup> Increment)
  - Interim Operating Criteria



# South Dade Investigation

- Interested in the information coming from this series of workshops
  - ▶ Provide additional information on Agency and stakeholder concerns with south Dade operations
  - ▶ Assist in the development and future implementation of Increment 2 Operational Strategy and Monitoring Plan
  - ▶ Provide understanding of Agency/Stakeholder vision for increments 2 and 3
    - May aid to identify book ends for adaptively managing test operations





# Real Estate - Locations

